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Atty. Docket No. STE01 P-798B

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*Rebecca A. Westers*  
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appln. No. : 08/998,302  
Examiner : B. Zimmerman  
Art Unit : 2735  
Applicant : Joel D. Stanfield et al.  
Filing Date : December 24, 1997  
For : ELECTRONIC SYSTEM, COMPONENTS AND METHOD FOR TRACKING FILES

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Assistant Commissioner for Patents  
Attn.: Director of Group 2700  
Washington, D.C. 20231

PETITION UNDER 37 C.F.R. §1.144

Applicants hereby petition the Commissioner to review the restriction requirement made in the July 28, 1999, Office Action for the above-identified patent application.

Applicants respectfully submit that the restriction requirement as set forth in the Office Action is improper and should be withdrawn.

As described below, the Examiner has now imposed a six-way restriction requirement on claims that he has already searched and rejected several times. In making the restriction requirement, the Examiner has misinterpreted/misapplied the standard for a subcombination/subcombination restriction in such a way that any dependent claims could be restricted from one another.

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## **I. Background**

### **A. The Originally Filed Claims**

This application is a continuation of U.S. Patent Application No. 08/379,944. In the parent application, a six-way restriction requirement was made. After convincing the Examiner to join two of the identified groups, Applicants elected and prosecuted the two rejoined groups. Having obtained allowance of some of the claims of the two elected groups in the parent application, Applicants canceled the rejected claims from the parent application so that the allowed claims could issue in a patent at an earlier date than if those claims were maintained in an application in which the rejected claims were appealed. Thus, it was Applicants' intent to pursue the rejected claims from the parent application in this application with full knowledge that it may be necessary to appeal the rejections on those claims to the Board of Patent Appeals and Interferences. In fact, Applicant has already filed a Notice of Appeal and will file an Appeal Brief in the time permitted. Therefore, Applicants request a prompt decision on this petition so as to determine which claims to address in the Appeal Brief.

The claims now presented in this application were all included in the elected claims of the parent application. During prosecution of the parent application, the Examiner had prepared and mailed several Office Actions in which all of the claims pending in this application had been examined and rejected. Despite the fact that the Examiner had already examined all the claims pending in this application several times over during the prosecution in

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the parent application, the Examiner now is requiring restriction of these sixty-three claims into six different groups.

In a first Office Action, the Examiner made an eight-way restriction requirement. Applicants petitioned for the withdrawal of that restriction requirement and the petition was granted. The Examiner responded by making the six-way restriction requirement that is the subject of this petition.

To assist the Group Director in reviewing this restriction requirement, Applicants have attached as Appendix A a chart showing the relative dependencies of all the pending claims, and have also attached as Appendix B a printout of all the pending claims.

B. The Restriction Requirement

The restriction requirement as set forth in the July 28, 1999, Office Action effectively reads as follows:

<u>Group</u>	<u>Claims</u>
I.	1-6 and 23-33
II.	1, 7-10, 19, 61, and 62
III.	1, 11-13, and 39-41
IV.	14-18, 20-22, 53-60, and 63
V.	42-52
VI.	34-38

In the Office Action, the Examiner states that Groups I through VI are related to one another as subcombinations disclosed as usable together in a single combination.

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C. Further Proceedings Regarding Restriction Requirement

Applicants responded to the restriction requirement by electing Group III with traverse in a response filed October 28, 1999. In that response/election, Applicants made extensive arguments as to why the restriction requirement was not proper. The Examiner responded in a subsequent Office Action mailed January 10, 2000, stating that the restriction requirement was upheld and was made final. Therefore, a petition under 37 C.F.R. §1.144 is now proper.

II. Reasons Why the Restriction Requirement Is Improper and Should Be Withdrawn

Applicants submit that the restriction requirement is improper for several reasons.

More specifically, the Examiner (1) has contrived a basis for restricting between subcombination claims that would apply to any two claims that are dependent upon a common independent claim, and (2) has not established that the alleged "species" are mutually exclusive. Additionally, the Examiner has not identified claim 1 as a generic claim, even though it is included in three of the designated groups and there are claims that depend from claim 1 in four of the six restricted groups.

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It is evident from the Office Action that the Examiner has a fundamental misunderstanding of when it is proper to restrict amongst subcombinations, as well as a misunderstanding of what is a "subcombination." The Examiner appears to use a standard by which one only looks at the two subcombinations and determines whether one of the subcombinations has a separate utility from the other subcombination. However, this is not the proper standard for making a restriction requirement between two subcombinations. MPEP §806.05(d) states:

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The examiner must show, by way of example, that one of the subcombinations has utility other than *in the disclosed combination*. Care must be taken to determine if the subcombinations are generically claimed.

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§ 804(b)

Where subcombinations as disclosed and claimed are both (a) species under a claimed genus and (b) related, then the question of restriction must be determined by both the practice applicable to election of species and the practice applicable to related inventions. If restriction is improper under either practice, it should not be required (MPEP §804(b)). [Emphasis added]

Thus, the standard is not whether one of the subcombinations has a different utility than the other subcombination, but rather whether one of the subcombinations has a utility different from the disclosed combination, which inherently includes each of the recited elements of both subcombinations. In many of the bases for restriction stated by the Examiner, a “separate” utility is alleged for the various subcombinations that, in fact, is shared by the other subcombinations. Thus, the Examiner’s basis for restriction is flawed in this respect as well.

Even more significant, it is noted that all of the claims are directed to a file tracking/locating system, each of which “comprises” at least a processor, a folder retainer, and at least one file folder. None of the claims are specifically directed solely to a component of the system, such as to the processor alone, the file folder alone, or to the folder retainers alone. Thus, there are no classic subcombinations claimed where there could otherwise clearly be separate utility from the disclosed system or from another separately claimed component of the system. Therefore, the basic utility for all of the claims is for tracking and locating file folders. In making the restriction requirements, the Examiner has instead focussed on the specific features of the file tracking/locating system that are recited in the claims. In many instances, the Examiner reads a particular feature that is recited in one group of claims and not

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in the other group of claims, and explains that this feature gives the claimed system a different “utility” from the system defined in the other claims. However, all of the claims utilize open claim language and the particular features are not excluded from use in the other systems, and thus, all the system claims could perform the same functions and have the same utility.

In presenting reasons for restricting Groups I and II, the Examiner states that Group I has separate utility such as “leading a human to the location of the folder.” The Examiner came to this conclusion even though the claims of both groups are clearly directed to a “file tracking system.” Applicants presume the Examiner is referring to the indicator located on one of the file folders as recited in dependent claim 2. The *disclosed combination* of the subcombination of Groups I and II necessarily includes the indicator as recited in claim 2. Accordingly, Group I (which includes claim 2) would not have separate utility than the disclosed combination, since both necessarily includes the recited indicator. Accordingly, the Examiner has failed to meet the burden of providing an example by which either subcombination would be separately useable from the *disclosed combination*, and accordingly, a proper basis for restricting Groups I and II has not been provided. Furthermore, the subcombinations of Groups I and II both provide the function of “leading a human to the location of a folder,” and thus, the stated separate utility is not “separate” at all.

It is further noted that both Groups I and II include claims that depend from independent claim 1. The Examiner has indicated that claim 1 would be included with any of Groups I through III. It is therefore apparent that independent claim 1 is generic to at least some of the claims defining Groups I and II. As stated in the above-quoted portion of MPEP

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§806.05(d), when subcombinations are both species under a claimed genus and related, then the Examiner must apply the practice applicable to both election of species and the practice applicable to related groups. MPEP §806.05(d) further points out that if restriction is improper under either practice, it should not be required. In the present case, claims 2-6 represent a species of generic claim 1, while claims 7-10 represent a different species of generic claim 1. The groups defined in these claims are related, since they are both simultaneously usable together in the disclosed combination. Accordingly, the Examiner must apply both practices for subcombinations and for an election of species. As indicated above, Groups I and II are not properly restricted based on the practice pertaining to related groups (subcombinations). Additionally, the restriction is improper because the Examiner has not applied the practice pertaining to an election of species, and because that practice would indicate that the restriction is improper.

For such a restriction of species to be proper, it is incumbent upon the Examiner to show that each of the species claims defines characteristics of the invention that are mutually exclusive of one of the characteristics defined in the other species claims. MPEP §806.04(e) defines "species" as follows:

*Species are always the specifically different embodiments.*

Species are *usually* but not always independent as disclosed (see MPEP §806.04(b)) since there is usually no disclosure of relationship therebetween. The fact that a genus for two different embodiments is capable of being conceived and defined, does not affect the independence of the embodiments, where the case under consideration contains no disclosure of any commonality of operation, function or effect.

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Most significantly, MPEP §804.04(f) states:

Claims to be restricted to different species *must be mutually exclusive*. The general test as to when claims are restricted, respectively, to different species is the fact that one claim recites limitations which under the disclosure are found in a first species but not in a second, while a second claim recites limitations disclosed only for the second species and not the first. This is frequently expressed by saying that the claims to be restricted to different species, *must* recite the mutually exclusive characteristics of such species. [Emphasis added]

As explained below, the alleged "species" claims restricted into different groups do not define mutually exclusive characteristics of the invention. In fact, the specification clearly teaches that all the recited characteristics may be found in a single system constructed in accordance with the present invention. Fig. 1 clearly shows a system including most, if not all, of the different types of disclosed folder retainers that may be used in the inventive system.

With respect to the restriction between Groups I and III, the Examiner contends that Group I has separate utility, such as locating a file using over-the-air signaling. Claims in both Groups I and III recite that a folder retainer is connected to the processor (see claims 1, 2, and 12, for example). Thus, it is not clear to what the Examiner is referring. It is noted that the claims of Group III do not exclude the use of over-the-air signaling. Claim 11, for example, recites the structure of a file folder, claim 12 recites the structure of a folder retainer, and claims 39-41 recite details of the file folder construction. As disclosed in the application and specifically as shown in Fig. 15, file folders having the constructions noted above and claimed, as well as folder retainers having the claimed structure, may be used in a system that employs over-the-air signaling. Note that file cabinet 50, tray 40, desk 85, and bookshelf 60 include conductive rails that contact conductive rails on a file folder. Because both subcombinations



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would enjoy the same use, the Examiner has not shown separate utility from the disclosed combination. Furthermore, because the features claimed in Groups I and III are not mutually exclusive from one another, and because the claims of Groups I and III depend upon a common generic claim (claim 1), restriction is improper because the practice relating to an election of species would apply, but the requirements for such election of species would not be met. Accordingly, the restriction requirement between Groups I and III is improper and must be withdrawn.

With respect to Groups I and IV, the Examiner states that Group I has separate utility, such as locating a loose folder not physically connected to another element. Applicants do not understand what the Examiner means by this statement. It is apparent that both subcombinations Groups I and IV include claims that recite that the file folder is coupled to the processor or bus when the file folder is placed in a folder retainer (see claims 2 and 54). Thus, it is not at all clear where the Examiner infers that Group I would have any such separate utility.

In addition, it is pointed out that claims 14-18 of Group IV depend from claim 12 of Group III, which depends from generic independent claim 1, as do claims 2-6 of Group I. Because of the presence of this generic claim and because Groups I and IV are related, the practice applicable to election of species must be applied. Here again, as clearly shown in Fig. 15, the two concepts are not mutually exclusive, and therefore, the practice under election of species dictates that the restriction requirement is improper for this additional reason. Accordingly, the restriction between Groups I and IV is improper and must be withdrawn.

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It is also noted that if claim 1 or 12 is allowed, claims 14-18 of Group IV would also be allowable and would need to be rejoined with the groups in which claim 1 and 12 are included.

With respect to Groups I and V, the Examiner contends that Group I has separate utility, such as locating or indicating to a human the location of a file. Again, as indicated above with respect to the restriction between Groups I and II, the disclosed *combination* includes the indicator that is recited in claims 2-6. Moreover, an indicator clearly could be used in the invention claimed in Group V. In fact, independent claim 43 of Group V specifically recites "a file locating device." Accordingly, the subcombination of Group I would not have such "separate" utility, and accordingly, the restriction between Groups I and V is improper and must be withdrawn.

With respect to Groups I and VI, the Examiner states that Group I has separate utility, such as locating or indicating to a human with over-the-air signals. Again, the disclosed combination includes the indicator recited in the claims that define Group I, and therefore, this does not constitute a separate utility for the subcombination of Group I. Furthermore, concerning the use of over-the-air signals, independent claim 34 of Group VI does not disclose any differing physical electrical connection structure that is not included in independent claim 1, which forms part of Group I. Thus, there is simply no separate utility in this regard for the two subcombinations.

For the reasons stated above, Groups I and VI are not properly restricted, and the restriction requirement should therefore be withdrawn.

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With respect to Groups II and III, the Examiner states that Group III has separate utility, such as reading information from a storage media on the file (equal to the file contents). Applicants do not understand what the Examiner is referring to. Claims 11-13 of Group III refer to the conductive rails of a folder retainer and the conductors provided on a surface of the file folders. Nowhere in these claims is there any reference to any information that can be read from a storage media on the file. Accordingly, Group III would not have such separate utility, since such utility is not even found in all the claims of this invention group. Thus, the restriction between Groups II and III is improper and should be withdrawn.

Regarding Groups II and IV, the Examiner states that Group IV has separate utility, such as writing data to a storage media on the file from a standalone data writer. Again, Applicants do not understand where the Examiner considers such utility to come from, since claims 14-18, which form a part of Group IV, do not recite anything to do with a storage media, a data writer, or writing data to any such storage media. Likewise, Group II includes claims that do not recite any such feature. For example, claim 8 merely recites that the processor is a personal computer. Therefore, the restriction of Groups II and IV is improper and should be withdrawn. It is also noted that claims 61 and 62 of Group II depend from independent claim 54 of Group IV. Accordingly, if claim 54 is allowed, claims 61 and 62 and the other claims of Group II must be rejoined with the claims of Group IV, because claims 61 and 62 would inherently be allowable.

With respect to Groups II and V, the Examiner states that Group V has separate utility, such as monitoring who has worked on a particular file. Because the disclosed *combination*

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inherently includes the same features that are recited in the claims of Group V, the disclosed combination would have the same utility. Based on the open claim language of the claims of Group II, the subcombination invention of Group II also could have the utility of monitoring who has worked on a particular file. There is no particular language in the claims of Group II that would exclude this functionality. In particular, independent claim 43, which is part of Group V, recites essentially the same features as in claim 8 of Group II, with the exception that claim 43 further recites additional information that may be stored in the database and that claim 8 recites that the processor is a personal computer and that the addressable device on a file folder is responsive to a control signal. Thus, the subcombination of Group II could certainly be used to monitor who has worked on a particular file. Accordingly, the Examiner has not met his burden for providing a separate utility for the subcombination from the disclosed combination. Accordingly, the restriction between Groups II and V is improper and should be withdrawn.

With respect to Groups II and VI, the Examiner states that Group II has separate utility, such as interacting file information to provide data about the file to various locations on a LAN. It is believed that the Examiner is referring to the features recited in claim 9, which recites that the processor is a computer coupled to a computer network. Again, the disclosed combination includes this feature, and hence, the Examiner has failed to show a separate utility for the subcombination apart from the disclosed combination. It is noted that with the exception of claims 9 and 10 of Group II, the remaining claims of Group II do not even mention a LAN or a network. Thus, to the extent that the Examiner contends that the

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remaining claims of Group II have the separate utility he states, then it is clear that the claims of Group VI also would have this utility. In fact, the claims of Group VI use open claim language and thus it is entirely possible that the system in which they are used would have the utility of interacting file information to provide data about the file to various locations on a LAN. The restriction between Groups II and VI is therefore improper and must be withdrawn.

With respect to Groups III and IV, the Examiner contends that Group III has separate utility, such as connecting file electronics to a data writer for storing information on a file. None of claims 11-13, which form a part of Group III, however, recite any such function or structure pertaining to a data writer for storing information on a file. Furthermore, it is not clear that the disclosed combination would not also have the same utility. The restriction requirement between Groups III and IV is improper and must be withdrawn.

With respect to Groups III and V, the Examiner states that Group III has separate utility, such as connecting file electronics to a data writer for storing information on an electronic portion of a file. Again, for the reasons stated above with respect to Groups III and IV, there are claims in Group III that do not recite any such structure, and the disclosed combination would inherently have this same utility. The restriction between Groups III and V is therefore improper and must be withdrawn. It is also noted that claims 39-41 of Group III depend from independent claim 38 of Group V. Accordingly, if claim 38 is allowed, claims 39-41 must also be allowed and thus rejoined along with the other claims of Group III, with Group V.

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With respect to Groups III and VI, the Examiner again states that Group III has separate utility, such as connecting file electronics to a data writer for storing information on an electronic portion of a file. Because Group III does not recite any such feature or structure and because the disclosed combination would inherently include this same utility if, in fact, it is found in Group III, the restriction between Groups III and VI is improper and must be withdrawn.

Regarding Groups IV and V, the Examiner states that Group IV has separate utility, such as to “store files requiring power to maintain data.” Claims 14-18, which form a part of Group IV, do not recite any structure pertaining to the storage of data, nor do they include any features relating to non-volatile memory. Thus, it is not at all clear where this utility comes from, nor is it clear that the disclosed combination or the other subcombination would not also include this utility. Accordingly, the restriction between Groups IV and V is improper and should be withdrawn.

Regarding Groups IV and VI, the Examiner states “invention IV has separate utility such as store files requiring power to maintain data.” For the reasons stated above with respect to the restriction between Groups IV and V, Applicants submit that the restriction requirement of Groups IV and VI is improper and must be withdrawn.

With respect to Groups V and VI, the Examiner states “invention V has separate utility such as providing information on who has had the file last.” To the extent that the claims of Group V recite specific features pertaining to tracking who had the file last, the disclosed *combination* would inherently also include this feature and hence have this same utility.

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Because no separate utility has been shown for the subcombination apart from the disclosed combination, the restriction between Groups V and VI is improper and must be withdrawn. It is also noted that claim 42 of Group V depends from independent claim 34 of Group VI. Thus, if claim 34 is allowed, claim 42 must also be allowed, and therefore, claim 42 along with the other claims of Group V would have to be rejoined with the claims of Group VI.

Because the claims of all of Groups I through VI are so intertwined by their dependence on one another, and because the Examiner has already issued Office Actions in the parent application that treat all the claims on their merits, Applicants submit that there would be no significant additional burden on the Examiner simply to examine all of the claims at once in this single application.

Thus, for the reasons stated above, each of the restriction requirements between the inventions of Groups I through VI are improper and must be withdrawn.

If the Patent Office ultimately decides that all six groups are independent or distinct from one another, at a minimum, it should be held that independent claim 1 is a generic claim that, if found allowable, would require rejoinder of all the claims of the Groups I-IV. Obviously, if a claim such as claim 1 were allowed, the inventions defined in Groups I through IV, which are defined by claims that depend from claim 1, would be also be allowable, and there would be no additional burden on the Examiner. Furthermore, insofar as it has now become necessary for Applicants to appeal the Examiner's rejection of claims 1, 11-13, and 39-41 in this application, it is in the Patent Office's own interest to allow all the claims to be grouped together and thereby significantly reduce the number of divisional applications and

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appeals that Applicants would be required to file before the Board of Patent Appeals and Interferences.

### **III. Conclusion**

For the reasons stated above, Applicants respectfully submit that the restriction requirement as presented in this application is improper and should be withdrawn. Applicants further point out that there appears to be no significant burden on the Examiner for rejoining all of the various invention groups, since there are broad claims that encompass most of the groups. Further, the fact that the various inventions require different searches does not present any additional burden on the Examiner, since he has already performed these searches and made rejections of these claims when presented in the parent application. Applicants further point out that the regrouping of all the claims in this application will serve to consolidate all these claims should an appeal to the Board of Patent Appeals and Interferences become necessary. Otherwise, Applicants will file five additional divisional applications, which will then need to be separately appealed thereby consuming the valuable time of the Board of Patent Appeals and Interferences. As an alternative, Applicants ask that the Commissioner at least consider identifying claim 1 as a generic claim that, if allowed, would require regrouping of all the claims of at least Groups I-IV.

For the reasons stated above, Applicants submit that the restriction requirement should be withdrawn, and therefore request such action. The petition fee of \$130 is enclosed. If any



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additional fees are required, Applicants request that they be charged to deposit account

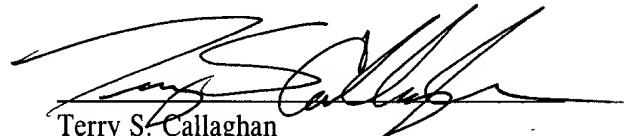
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Respectfully submitted,

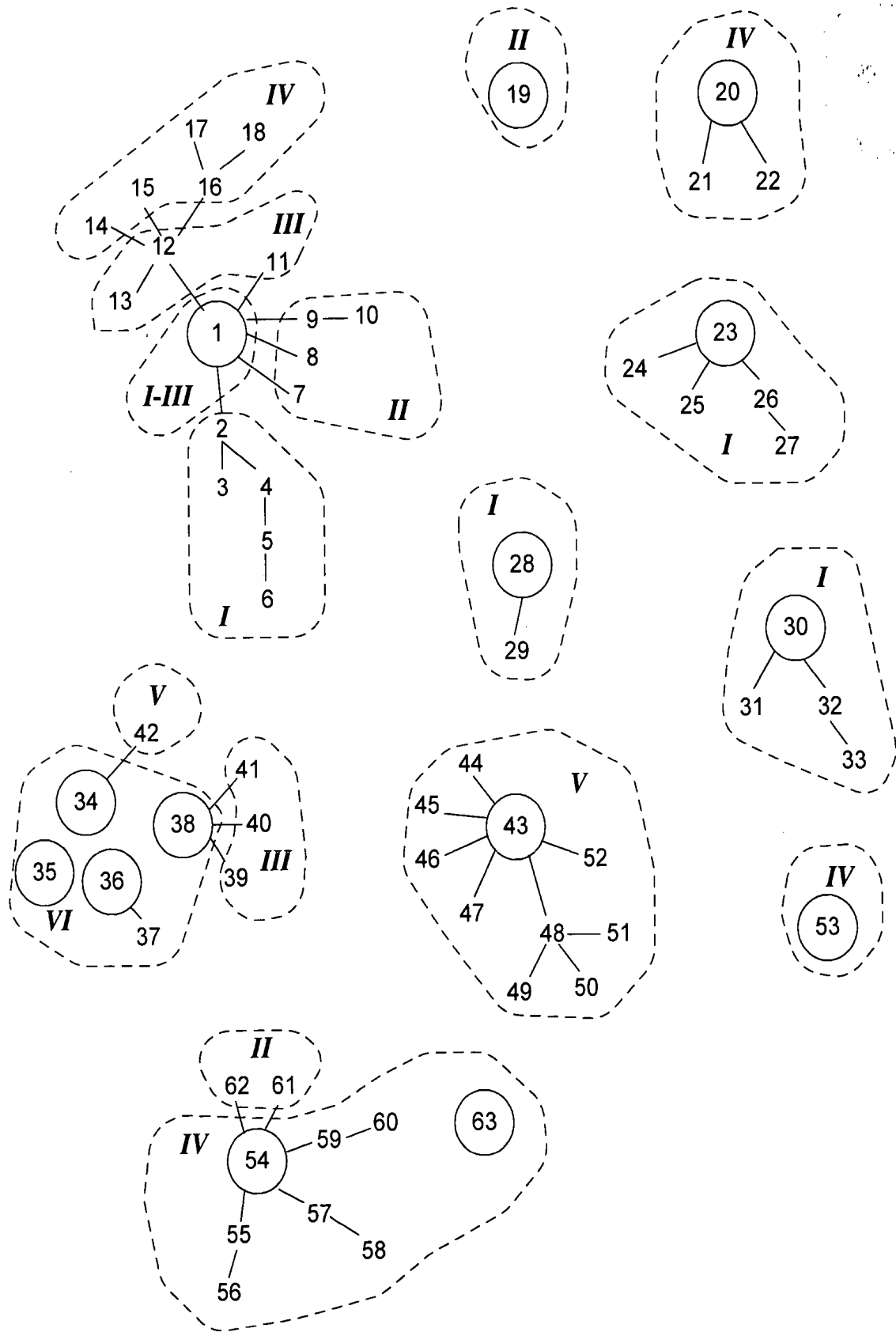
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## ***APPENDIX B***

1. A file tracking system comprising:
  - a database for maintaining file location and unique file addresses for a plurality of files;
  - a processor for interfacing with said database and issuing control signals;
  - a bus connected to said processor;
  - a folder retainer connected to said processor by said bus; and
  - a plurality of file folders, each file folder including an addressable device adapted to be electrically connected to said bus when the file folder is placed in said folder retainer, each addressable device being responsive to a control signal including the unique address associated with the addressable device to transmit a signal back to said processor so that said processor may maintain the file location of each file in said database.
2. The file tracking system of claim 1, further including an indicator located on one of said file folders, wherein said addressable device includes an addressable switch and said indicator is activated when said addressable switch receives a control signal from said processor including the unique address corresponding to the file folder.
3. The file tracking system of claim 2, further including:
  - an input device for receiving commands and file identification information from an operator and providing the commands and file identification information to said processor,
  - wherein, when the operator inputs a command to search for a specific file, said processor accesses a unique address and file location stored in said database as corresponding

to input file identification information identifying the specific file to be searched for, displays the file location, and transmits a control signal including the unique address to the addressable switch of the file folder containing the specific file causing the addressable switch to activate the indicator.

4. The file tracking system of claim 2, wherein said addressable switch includes:

a ROM having the unique file address stored therein;

address comparing means for comparing an address included in a control signal received from said the processor with the unique address stored in said ROM; and

state changing means for changing the state of said addressable switch when said address comparing means determines that the address included in the received control signal is the same as the unique address stored in said ROM.

5. The file tracking system of claim 4, wherein said addressable switch further includes a load transistor having a gate, a source, and a drain, said gate connected to said state changing means, wherein said state changing means changes the state of said addressable switch by turning on and off said load transistor.

6. The file tracking system of claim 5, wherein said indicator is an indicator light having a first terminal connected to said first conductor, and a second terminal connected to said source of said load transistor, wherein said drain of said load transistor is connected to said second conductor, and said indicator light is turned on when said load transistor is turned on by said state changing means.

7. The file tracking system of claim 1, wherein said processor includes:
- polling means for periodically polling said file folders to determine the presence and location of each file folder;
- means for updating said database when said polling means determines that a file location is different from the location previously stored or that a file that said database previously indicated as present is no longer present.
8. The file tracking system of claim 1, wherein said processor is a personal computer.
9. The file tracking system of claim 1, wherein said processor is any one of a plurality of computers connected to a local area network.
10. The file tracking system of claim 9, wherein said database is a distributed database accessible by any one of said plurality of computers.
11. The file tracking system of claim 1, wherein each of said file folders further include:
- a surface;
- a first conductor on said surface for providing control signals to said addressable device when the file folder is placed in said folder retainer; and
- a second conductor on said surface for providing a ground to said addressable device.
12. The file tracking system of claim 1, wherein said folder retainer includes:
- at least one surface;

a first conductive rail positioned on said surface for providing power and control signals to the addressable devices positioned on said plurality of file folders when said file folders are placed in said folder retainer; and

a second conductive rail positioned on said surface for providing a ground to the addressable devices when said plurality of file folders are placed in said folder retainer.

13. The file tracking system of claim 12, wherein at least one of said first and second conductive rails are integrated into a suspension rail of a file drawer upon which hanging file folders may be suspended.
14. The file tracking system of claim 12, wherein said folder retainer includes a plurality of shelves, and at least one of said first and second conductive rails are located on at least one of said shelves.
15. The file tracking system of claim 12, wherein said folder retainer is a file tray, wherein at least one of said first and second conductors are positioned in said file tray.
16. The file tracking system of claim 12, wherein said surface is an interior surface of a file drawer for use in a file cabinet, wherein at least one of said first and second conductive rails are positioned in said file drawer.
17. The file tracking system of claim 16, wherein at least one of said first and second conductive rails are positioned along a bottom of said file drawer.

18. The file tracking system of claim 16, wherein at least one of said first and second conductors are positioned along a side of said file drawer.

19. A file tracking system comprising:

a database for maintaining file location and unique file addresses for a plurality of files;

a processor for interfacing with said database and issuing control signals;

a bus connected to said processor;

an input device for receiving commands and file identification information from an operator and providing the commands and file identification information to said processor;

a plurality of folder retainers each connected to said bus via an addressable switch having a unique address, and each including an indicator for indicating the presence of a searched for file folder that is located therein; and

a plurality of file folders, each file folder including an addressable switch adapted to be electrically connected to said bus when the file folder is placed in said folder retainer, and each including an indicator that is activated when said addressable switch receives a control signal from said processor including the unique address corresponding to the file folder,

wherein, when the operator inputs a command to search for a specific file, said processor

identifies a first unique address and file location stored in said database as corresponding to input file identification information identifying the specific file to be searched for,

displays the file location,

identifies a second unique address in said database for the addressable switch of the folder retainer in which the searched for file folder is located,  
transmits a control signal that energizes a segment of said bus within the folder retainer corresponding to the searched for file,  
transmits a control signal including the second unique address to the addressable switch of the folder retainer causing the indicator of the folder retainer to activate, and  
transmits a control signal including the first unique address to the addressable switch of the file folder containing the specific file causing the addressable switch to activate the indicator located on the file folder.

20. A file tracking system comprising:

a database for maintaining file location and unique file folder address for a plurality of files, and a unique drawer address of each file drawer in which the files are located;

a processor for interfacing with said database and issuing control signals;

a bus connected to said processor;

a plurality of file cabinets, connected to said processor by said bus, each of said file cabinets including a plurality of file drawers, each file drawer having:

an outer face,

an addressable drawer indicator switch including a unique drawer address,

a drawer indicator light connected to said addressable drawer indicator switch and located on said outer face the file drawer,



a first conductive rail connected to said bus for receiving control signals from said processor, and

a second conductive rail for providing a ground,

wherein said addressable drawer indicator switch illuminates said drawer indicator light when said addressable drawer indicator switch receives a control signal from said processor including the unique drawer address corresponding to the file drawer; and

a plurality of file folders, each file folder including an addressable folder indicator switch and a folder indicator light, wherein said addressable folder indicator switch is connected to said first and second conductive rails when the file folder is placed in one of said file drawers, and said folder indicator light is illuminated when said addressable folder indicator switch receives a control signal from said processor including the unique folder address corresponding to the file folder.

21. The file tracking system of claim 20, wherein said database additionally maintains a unique cabinet address, and said file cabinets each further include an addressable cabinet indicator switch connected to said bus and having a unique cabinet indicator address, and a cabinet indicator light connected to said addressable cabinet indicator switch, wherein said addressable cabinet indicator switch illuminates said cabinet indicator light when said addressable cabinet indicator switch receives a control signal from said processor including the unique cabinet indicator address corresponding to the file cabinet.

22. The file tracking system of claim 20, wherein said first conductive rail provides power to said addressable folder indicator switches and said addressable drawer indicator switches.

23. A method of locating a file comprising the steps of:

inputting information identifying the file to be located;

accessing a database to determine a present location of the file, a unique identification code associated with a receiver at the present location of the file, and a unique identification code associated with the file;

transmitting a first control signal to the receiver at the present location of the file, the first control signal including the unique identification code of the receiver, transmitting a second control signal to the file, the second control signal including the unique identification code of the file; and

activating an annunciator in response to receipt of one of the first and second control signals.

24. The method of claim 23, wherein the annunciator is located on the file.

25. The method of claim 23, wherein the annunciator is located on the receiver.

26. The method of claim 23, wherein the annunciator is an indicator light.

27. The method of claim 26, wherein said indicator light is located on the file and wherein the method further includes the step of illuminating a second indicator light on the receiver in response to receipt of the first control signal at the receiver.

28. A method of locating a file comprising the steps of:

- inputting information identifying the file to be located;
- accessing a database to determine a present location of the file, a unique identification code associated with a folder retainer in which the file is located, and a unique identification code associated with the file;
- transmitting a control signal to the file, the control signal including the unique identification code of the file and the unique identification code of the folder retainer; and
- illuminating an indicator light on the file in response to receipt of the control signal at the file.

29. The method of claim 28, further including the step of illuminating a second indicator light on the folder retainer in response to receipt of the control signal at the folder retainer.

30. A file locating system comprising:

- a database for maintaining file location and unique file addresses for a plurality of files;
- a processor for interfacing with said database and issuing control signals;
- a bus connected to said processor;
- a folder retainer, connected to said processor by said bus;

a plurality of file folders, each file folder including an addressable switch connected to said bus when the file folder is placed in said folder retainer;

a file locating device adapted to aid in the location of a file folder in response to control signals issued by said controller; and

a conductor provided in said folder retainer and coupled to said bus, for establishing a common communication path along which said control signals issued from said processor are transferred to the addressable switches of at least two of said file folders.

31. The file locating system of claim 30, wherein said file locating device is an indicator light located on the file folder.

32. The file locating system of claim 30, further including:

input means for inputting information identifying the file folder to be located, wherein

said processor accesses said database to determine a present location of the identified file folder, a unique identification code associated with a folder retainer in which the file folder is presently located, and a unique identification code associated with the file folder,

said processor transmits a control signal to the folder retainer in which the file folder is located, the control signal including the unique identification code of the file folder and the unique identification code of the folder retainer, and

said file locating device includes an annunciator activatable in response to receipt of the control signal, said annunciator being located on said folder retainer.

33. The file locating system of claim 32, wherein said annunciator is an indicator light.

34. (Three times amended) An electronic file tracking system comprising:

- a database for maintaining file identity, file location, and unique file addresses for a plurality of files;

- a processor for issuing control signals;

- a folder retainer having electrical contacts communicatively coupled to said processor;

and

- a plurality of file folders, each file folder including an addressable device adapted to be electrically coupled to said processor when the file folder is placed in said folder retainer, and a conductor located on said file folder and configured so as to electrically couple said addressable device to the electrical contacts of said folder retainer when said file folder is positioned in each of several different positions.

35. (Twice Amended) An electronic file tracking system comprising:

- a processor for issuing control signals;

- a folder retainer having electrical contacts communicatively coupled to said processor;

and

- a plurality of file folders, each file folder including an addressable device adapted to be electrically coupled to said processor when the file folder is placed in said folder retainer, and a conductor located on said file folder and configured so as to electrically couple said addressable device to the electrical contacts of said folder retainer when said file folder is positioned in any one of several different positions, wherein, for at least one file folder, said conductor is configured to electrically couple said addressable device to the electrical contacts

of said folder retainer when said file folder is positioned in each of several different orientations with respect to the electrical contacts.

36. (Twice Amended) An electronic file tracking system comprising:

a processor for issuing control signals;

a folder retainer having electrical contacts communicatively coupled to said processor;

and

a plurality of file folders, each file folder including an addressable device adapted to be electrically coupled to said processor when the file folder is placed in said folder retainer, and a conductor located on said file folder and configured so as to electrically couple said addressable device to the electrical contacts of said folder retainer when said file folder is positioned in any one of several different positions, wherein, for at least one file folder, said conductor is configured to electrically couple said addressable device to the electrical contacts of said folder retainer when said file folder is positioned in each of several different positions with respect to an adjacent file folder.

37. The electronic file tracking system of claim 36, wherein, for at least one file folder, said conductor is configured to electrically couple said addressable device to the electrical contacts of said folder retainer when said file folder is positioned in any one of several different rotated positions with respect to an adjacent file folder.

38. (Twice Amended) An electronic file tracking system comprising:

a processor for issuing control signals;

a folder retainer having electrical contacts communicatively coupled to said processor;  
and

a plurality of file folders, each file folder including an addressable device for electrically coupling to said processor when the file folder is placed in said folder retainer, and a conductor located on said file folder and configured so as to electrically couple said addressable device to the electrical contacts of said folder retainer when said file folder is positioned in any one of several different positions, wherein, for at least one file folder, said conductor is configured to electrically couple said addressable device to the electrical contacts of said folder retainer at a plurality of locations on said file folder.

39. The electronic file tracking system of claim 38, wherein at least one of said plurality of locations is the side surface of said file folder.

40. The electronic file tracking system of claim 38, wherein at least one of said plurality of locations is the edge surface of said file folder.

41. The electronic file tracking system of claim 38, wherein one of said plurality of locations is the side surface and another one of said plurality of locations is the edge surface of said file folder.

42. The electronic file tracking system of claim 34, and further comprising a database for maintaining file location and unique file addresses for a plurality of files, wherein said processor interfaces with said database.

43. A file locating system comprising:

a database for maintaining file location code and unique file addresses for a plurality of files, said database further maintains general file information for a plurality of files including at least one of a description of contents within the file, file classification, a key word list associated with the file, a title of the file, an originator of the file, accessibility permission lists for the file, location descriptions associated with each file location code, and historical information for a plurality of files;

a processor for interfacing with said database and issuing control signals;

a bus connected to said processor;

a folder retainer, connected to said processor by said bus;

a plurality of file folders, each file folder including an addressable switch connected to said bus when the file folder is placed in said folder retainer; and

a file locating device adapted to aid in the location of a file folder in response to control signals issued by said controller.

44. The file locating system of claim 43, wherein the general file information stored in said database includes a key word list, which lists certain key words that describe or may be found in a file.

45. The file locating system of claim 43, wherein the general file information stored in said database includes file classification, which indicates any classification groups with which a file folder is associated.



46. The file locating system of claim 43, wherein the general file information stored in said database includes accessibility permission lists, which are used to prevent certain individuals from accessing certain file folders.

47. The file tracking system of claim 43 and further including a plurality of folder retainers connected to said processor by said bus and remotely located relative to a memory device in which said database is stored, wherein the location descriptions stored in said database for each of said plurality of files identifies the folder retainer in which the corresponding file folder is located.

48. The file tracking system of claim 43, wherein said historical information includes at least one of file location history, file access history, and file retention history.

49. The file tracking system of claim 48, wherein the historical information stored in said database includes file location history, which indicates the locations and dates at which a file folder has been located over a period of time.

50. The file tracking system of claim 48, wherein the historical information stored in said database includes file access history, which indicates who checked out a file folder and when the file folder was checked in or out.

51. The file tracking system of claim 48, wherein the historical information stored in said database includes file retention history, which identifies the length of time since a file folder was last accessed in order to determine whether the file may be purged.

52. The file tracking system of claim 43, wherein said database further maintains a time stamp for a plurality of files indicating a time that a file was added, removed, and/or detected at a new location.

53. A file tracking system comprising:

a processor for issuing control signals;

a folder retainer having electrical contacts communicatively coupled to said processor;

and

a plurality of file folders, each file folder including an addressable device connected to conductive contacts provided on an exterior surface of the file folder and adapted to be electrically coupled to said contacts of said folder retainer,

wherein said folder retainer is configured to support file folders that are stacked vertically upon one another such that each addressable device on each file folder in a vertical stack supported by said folder retainer, is coupled to said electrical contacts of said folder retainer through the conductive contacts provided on file folders therebelow.

54. A file tracking system comprising:

a processor for issuing control signals;

a plurality of folder retainers communicatively coupled to said processor, wherein at least one of said folder retainers is configured to support file folders in an orientation different than that in which another folder retainer supports file folders; and

a plurality of file folders, each file folder including an addressable device adapted to be communicatively coupled to said processor when the file folder is placed in any one of said folder retainers.

55. The file tracking system of claim 54, wherein said at least one folder retainer is configured to support hanging file folders.

56. The file tracking system of claim 55, wherein said at least one folder retainer is a file cabinet drawer.

57. The file tracking system of claim 54, wherein said at least one folder retainer is configured to support file folders stacked vertically on top of one another.

58. The file tracking system of claim 57, wherein said at least one folder retainer is a file tray.

59. The file tracking system of claim 54, wherein said at least one folder retainer is configured to support file folders that horizontally abut one another.

60. The file tracking system of claim 59, wherein said at least one folder retainer is a shelf.

61. The file tracking system of claim 54, wherein at least one of said folder retainers is communicatively coupled to said processor by an RF link.
62. The file tracking system of claim 54, wherein at least one of said folder retainers is communicatively coupled to said processor by a bus.
63. A file tracking system comprising:
- a database for maintaining file identity, file location, and unique file addresses for a plurality of files;
  - a processor for interfacing with said database and issuing control signals;
  - a bus connected to said processor;
  - a plurality of folder retainers connected to said processor by said bus, wherein at least one of said folder retainers is configured to support file folders in an orientation different than that in which another folder retainer supports file folders; and
  - a plurality of file folders, each file folder including an addressable device adapted to be electrically connected to said bus when the file folder is placed in any one of said folder retainers.